

**DBI Services**  
**Integrated Pest Management Plan**

<b>IPM Plan Effective Dates:</b>	June 2016 – August 2018
<b>Management Area Name/Location:</b>	White Pass & Yukon Route / Skagway, AK
<b>General Site Description:</b>	Along railway located on state owned land/right of ways.
<b>Land Uses:</b>	WPYR Scenic Railway
<b>Name of Person in Charge:</b>	Gabe Davis
<b>Certified Applicator Name(s):</b>	Chad Ruffing, Gabe Davis
<b>Certification Numbers:</b>	9868-1612-9, 9854-1612-9

**1. Action Thresholds**

Check the types or categories of pests that might present a problem or need to be controlled at this management site:

✓	<b>Category</b>
✓	<b>Vegetation</b>
	<b>Insects</b>
	<b>Fungus</b>
	<b>Rodents</b>
	<b>Other (describe below)</b>

**For each pest category listed above, describe the level at which the pest becomes a problem which requires control measures to be taken.**

100% control on ballast within the 16' spray pattern which will be 8' from center of track wherever the railroad's right of way expands to 8' from center of tracks.
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## 2. Monitor and Identify Pests

### **How often will the management area be inspected for the presence of pests?**

The initial inspection took place in August of 2013 to assess the amount of weeds along the right of ways.

The post application inspections, for controlled results, will take place 30 days after initial application.

Bi-annual inspections will occur after the initial application takes place to monitor continuing results.

### **Which locations will be inspected?**

The entire railroad right of way will be inspected to confirm desired control results have been met.

### **What methods will be used for identifying and quantifying the presence of pests?**

Visual inspections will be used for observing any noxious weeds within the railroad's right of way before and after the application.

### **How will pest species be identified?**

All pest species will be targeted with selective, state approved herbicides, within the railroad right of way.

### **Describe record keeping procedures:**

SITE: White Pass and Yukon Route right of way (ROW)

DILUTION: 30 gallons of solution per acre,

TOTAL APPLIED: 1500 gallons of herbicide solution will be applied at a 16' pattern on the railroad's 50 acres of ROW

Detailed, Daily Activity Reports, (DARs) will be updated by the operator, or inspector, during each application and inspection.

DARs contain detailed information including the following; equipment type, herbicide with EPA #, weather conditions, time and date of application, operator license information, type of application, rate of application, location of application, total acres of application, state license #, company contact information, customer contact information, species and density of plant material.

DARs will be filled out daily during inspections to log results, observations, and recommendations.

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### 3. Prevent Pests

**For each pest category listed under Section 1, describe preventative measures that will be taken:**

Preventative measures such as; weed barriers and ballast replacement are not economically feasible for the control of noxious and feral weeds on the railroad's right of ways. Weed barriers are temporary and similar to their use in garden plots often allow weed growth well before the advertised time of control. Ballast replacement is economically unfeasible based on the amount of work required for this short term weed control method. Hours of heavy machinery use is needed to remove, clean, replace, and deliver heavy ballast along the railroad's right of way. Combined with the weed barrier addition to the ballast at time of replacement a hefty cost is acquired for land owner and for the environment with excessive carbon emission release from machinery and trucks required for the work along with the possibility of soil and weed seed displacement during ballast or weed barrier replacement and addition. State approved herbicides can be selectively applied, at approved annual rates targeting specific weed species, from the train car during normal operation on the railroad.

**How often will preventative measures be applied?**

No appropriate preventative measures are currently cost effective/available. See above for explanation.

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### 4. Control Measures

**For each pest category listed under Section 1, list potential non-chemical control measures that may be used:**

<b>Cultural Controls:</b>	Prescribed burns are not recommended along railroad right of ways based on narrow right of way widths and concern for loss of control of prescribed fires. Cultural controls such as Shading, pH adjustments, and animal or insect release for control of nuisance and exotic weed control is not practical on most railroad right of ways based on limited access for shade structures or fabrics and clearance around train cars, ballast above soils supporting railroad ties and structure, and environmental balances affected by the introduction of biological species into an area that cannot be contained to specific property boundaries. None of these controls listed will be used.
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<b>Mechanical Controls:</b>	Vegetation along the railroad right of ways may be cut or mowed. These mechanical techniques are not cost, or time, effective and may increase build up of fire hazard biomass along the right of ways. Any mechanical operation may increase fire hazards with high rpm cutting or mowing equipment. These controls will NOT be used.
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**For each pest category listed under Section 1, describe the characteristics needed in any chemical controls that may be used:**

Vegetation will be controlled by pre-emergent, and post-emergent, herbicides that offer some residual control to prevent future weed growth along the right of way.

**For each pest category listed under Section 1, list potential chemical controls that may be used:**

<b>Target Pest</b>	<b>Product Name</b>	<b>EPA Registration Number</b>
Vegetation	Oust Extra	352-622

**Describe how treated areas will be re-inspected and evaluated for effectiveness of controls:**

Bi-annual inspections will occur along the railroad's right of way to ensure proper control has occurred and weed growth has been slowed or stopped.